NOAA and OAR Approaches to Research Planning



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OAR Science Reviews

- Conducted every four years to evaluate the <u>quality</u>, <u>relevance</u>, and <u>performance</u> of research and development in OAR labs
 - ESRL Chemical Sciences was reviewed January 2008
- Assist in strategically positioning the lab for planning future science
- Intended to ensure that research is preeminent and linked to the NOAA Strategic Plan
- The Review Panel is asked to evaluate each science area based on specific questions within the Charge to the Review Panel

Oceanic & Atmospheric Research

Vision

A society that uses the results of our research as the scientific basis for more productive and harmonious relationships between humans and the environment. *



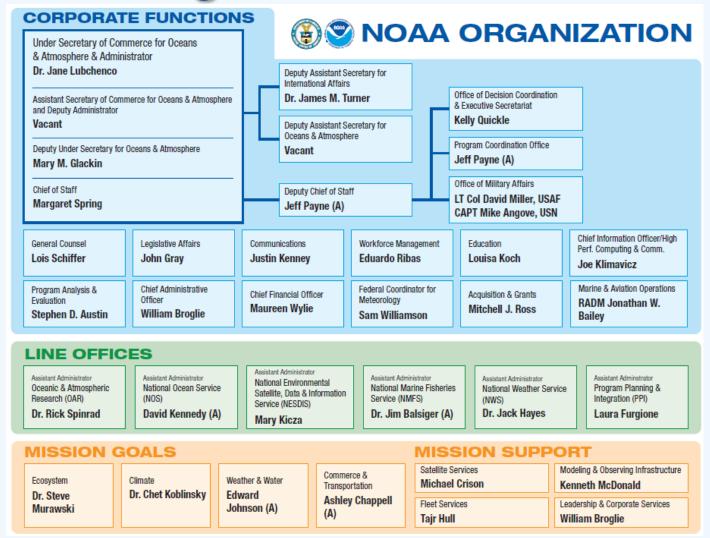


MissionTo conduct environmental research, provide scientific information and research leadership, and transfer research into products and services to help NOAA meet the evolving economic, social, and environmental needs of the Nation.*

*From OAR Strategic Plan (2005-2010)

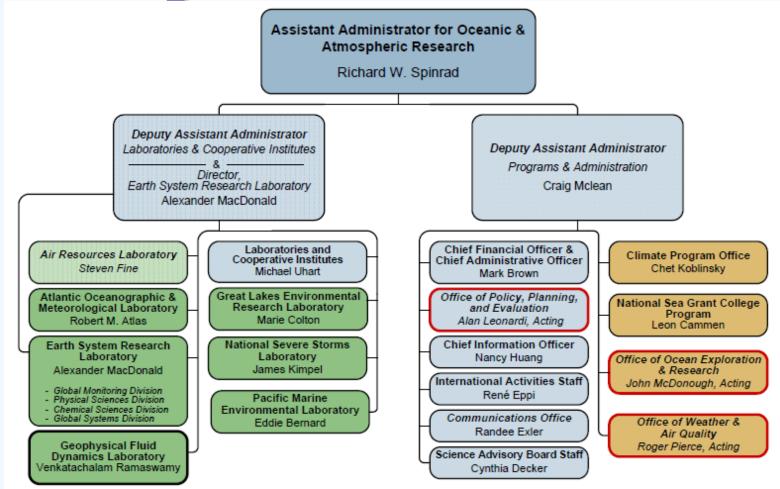


NOAA's Organization





OAR Organization

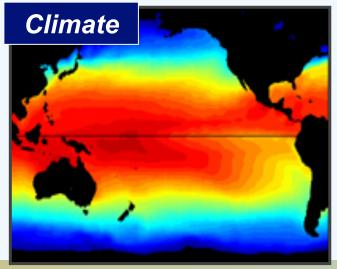




NOAA's Mission Goals











NOAA's Mission Goals





NOAA Strategic Plan: (FY 09-14)

- NOAA's 5 mission goals were <u>derived from stakeholder</u> <u>input and internal assessments</u> of our mandates and mission.
- For each mission goal, the Strategic Plan lists the relevant:
 - Performance to date
 - Programs
 - Outcomes and Objectives
- NOAA's Next Generation Strategic Plan is expected in mid-2010
- NOAA's research enterprise develops the understanding required for each goal to achieve its mission and associated outcomes in the Strategic Plan



NOAA Strategic Plan: Climate

Outcomes

- A predictive understanding of the global climate system...
- Use of NOAA's climate products by climate-sensitive sectors and... the public

Objectives

- Describe and understand the state of the climate system...
- Understand and predict climate variability and change...
- Improve the ability of society to plan for and respond to climate variability and change



NOAA Strategic Plan: Weather & Water

Outcomes

- Reduced loss of life, injury, and damage...
- Better, quicker, and more valuable weather and water information to support improved decisions

Objectives

- Increase lead-time and accuracy for ... warning and forecasts
- Improve predictability of ... hazardous and severe W&W events
- Increase application and accessibility of W&W information...
- Increase development, application and transition of [research] to operations
- Integrate ... observation systems... to increase collaborations...
- Reduce uncertainty associated with W&W forecasts and warnings



Drivers for NOAA Research

Policy Drivers

- NOAA Strategic Plan (FY 09-14)
- United States Global Change Research Program (USGCRP)
- Next Generation Air Transportation System
- NOAA 5-Year Research Plan
- NOAA 20-Year Research Vision

Legislative Drivers

- National Integrated Drought Information System (NIDIS)
- National Climate Program Act (NCPA)
- Global Change Research Act (GCRA)
- America COMPETES Act





NOAA 5-Yr Research Plan (FY 08-12)

- Emphasizes the integration of the observational, experimental, analytical, and modeling tools that are the core of NOAA's research
 - Identifies specific research <u>milestones and objectives</u> to reach our Strategic Plan Goals and Objectives,
 - Encourages <u>transformational research</u>, and
 - Based on <u>societal needs</u>



NOAA 5-Yr Research Plan Development

- Developed by NOAA Research Council
 - Input from NOAA line offices and mission goals, external partners, along with public commentary
- New Research Plan development: Science Workshop (March) and Science Conference (summer)

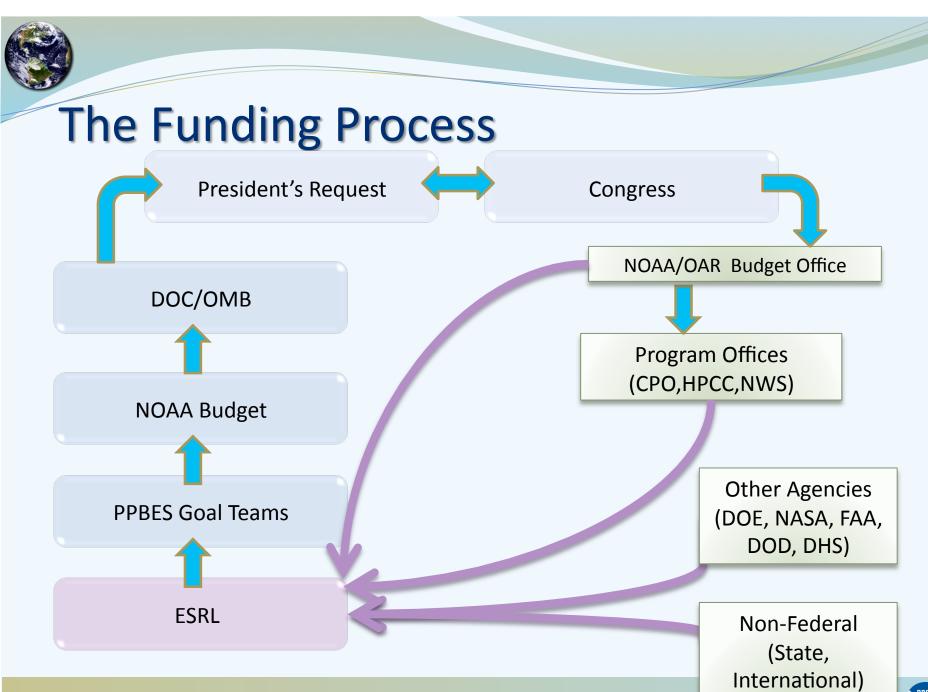


NOAA 5-Yr Research Plan:

Overarching Research Questions

- What factors influence ecosystem processes and ... forecasts [of] their future state?
- What are the causes and consequences of climate variability and change?
- What improvements to observing systems, analysis approaches and models will allow [lead] us to better predict[ions] ...?
- How are uncertainties ... best estimated and communicated?
- How can the ... warning times for ... high-impact environmental events be increased significantly?







NOAA Research Tenets

Preeminent Research Value to Society Culture of Transparency